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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,803	02/06/2004	William Cullen	23982-08745	8465
758 FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			EXAMINER ENG, DAVID Y	
7590 10/30/2007			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 10/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/773,803	CULLEN, WILLIAM	
	Examiner	Art Unit	
	DAVID Y. ENG	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 18-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-62 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/23/2006; 11/1/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-17, drawn to a system for dynamically routing a message over a network having a plurality of nodes, classified in class 709, subclass 238.
- II. Claims 18-38, drawn to a method for publishing a message in a publish/subscribe architecture having at least one publisher, a plurality of subscribers and plurality of brokers, classified in class 709, subclass 200.
- III. Claims 39-48, drawn to a method for forwarding a message in a publish/subscriber architecture having at least one publisher, a plurality of subscribers and plurality of brokers, classified in class 709, subclass 200.
- IV. Claims 49-53, drawn to a method for establishing a subscription to a topic in a publish/subscribe architecture having at least one publisher, a plurality of subscribers, and plurality of brokers, classified in class 709, subclass 242.
- V. Claims 54-58, drawn to a method for automatically terminating a subscription to a topic in a publish/subscribe architecture having at least one publisher, a plurality of subscribers, and plurality of brokers, classified in class 709, subclass 225.
- VI. Claims 59-61, drawn to a method for delivering message to a durable subscriber in a publish/subscribe architecture having at least one

publisher, a plurality of subscribers and plurality of brokers, classified in class 709, subclass 217.

- VII. Claim 62, drawn to a method for controlling traffic in a publish/subscribe architecture having at least one publisher, a plurality of subscribers, and plurality of nodes, classified in class 709, subclass 223.

Inventions I to VII are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus (claim 1) as claimed can be used to practice different processes (evidenced by Independent claims 18, 39, 49, 54, 59 and 62, see the last sentence of the abstract).

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Creg T. Sueoka on 10/1/2007 a provisional election was made without traverse to prosecute the invention of Group I claims 1-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-62 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Status of Claims

Claims 1-62 are pending. Claims 18-62, as being drawn to a non-elected invention, are withdrawn from consideration by the examiner. Claims 1-17 are rejected for the following reasons.

The Specification

Applicants are requested to update the status of related application on page 1 of the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 are rejected under 35 U.S.C. 102(e) as being obvious by Koo (USP 6,901,447).

Koo teaches:

Claim 1

A system (Figures 3 and 6) for dynamically routing a message over a network having a plurality of nodes (61-64), the system comprising:

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a publisher (611, 631, 632) for generating and sending the message on a topic, the publisher having an output (see arrows);

a plurality of subscribers (612, 621 etc.) each having an input for receiving the message, each of the plurality of subscribers subscribing to the topic; and

a broker (event service, (61-64) having an input, an output and a topic/node table, the broker routing the message to the plurality of subscribers in response to receipt of the message, the broker determining which of the plurality of nodes to which to send the message for delivery to the plurality of subscribers, the input of the broker coupled to the output of the publisher, and output of the broker coupled to the inputs of the plurality of subscribers.

Claims 2, 3

The "wherein clauses" merely consist of non-functional descriptive material.

Claims 4,

Memory for storing incoming information is inherent in devices receiving information.

Claims 5,

Inherent in a system for delivering messages. Some day sooner or later, some of the messages may not be deliverable because of address changed.

Claims 7,

See the list in column 6 lines 43-45.

Claims 8,

See Figure 6.

Claims 9,

Subscribing module is inherent in a system which has and serves subscribers.

Claims 10,

Publishing module is inherent in a publisher which publishes and delivers published material to subscribers.

Claim 11,

See the event services linked together for delivering published material to subscribers in Figure 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (USP 6,901,447) Nakata (USP 6,452,934).

Claims 12, 13, 17

Koo teaches claim combination set forth above. Koo does not teach redundant routes. However, Nakata teaches a network having redundant routes. From the teaching of Nakata, it would have been obvious to a person of ordinary skill in the art to have redundant routes in Koo so that messages are able to reach destination using alternate routes.

Claim Rejections - 35 USC § 103

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (USP 6,901,447) in view of Leighton (USP 7,096,263).

Claim 14

Koo teaches claim combination set forth above. Koo does not teach load balance. However, Leighton teaches load balance in a network system. See column 14 lines 51-53 in Leighton. From the teaching of Leighton, it would have been obvious to a person of ordinary skill in the art to incorporate load balancing in Koo such that there is no overload.

Claim Rejections - 35 USC § 103

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (USP 6,901,447) in view of Olson (USP 5,245,616)

Claims 15, 16


Koo teaches claim combination set forth above. Koo does not teach eliminate or filter duplicate messages. See column 4 lines 3-9 in Olson. Olson teaches a network system capable of eliminate or filter duplicate messages. From the teaching of Olson, it would have been obvious to a person of ordinary skill in the art to eliminate or filter out the duplicate message so as to save bandwidth resource.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID Y. ENG whose telephone number is 571-272-3984. The examiner can normally be reached on M-F from 8AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SALEH NAJJAR, can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAVID Y. ENG
PRIMARY EXAMINER